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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,029	06/27/2003	Chang Wook Han	049128-5111	5609
9629	7590	07/13/2007		
MORGAN LEWIS & BOCKIUS LLP 1111 PENNSYLVANIA AVENUE NW WASHINGTON, DC 20004			EXAMINER QUINTO, KEVIN V	
			ART UNIT 2826	PAPER NUMBER
			MAIL DATE 07/13/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/607,029	HAN, CHANG WOOK	
	Examiner	Art Unit	
	Kevin Quinto	2826	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 June 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-28,30 and 32-36 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 4-14,24-28,30 and 32-34 is/are allowed.
- 6) ☒ Claim(s) 1,2,15-17,19 and 35 is/are rejected.
- 7) ☒ Claim(s) 3,18,20-23 and 36 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment under 37 C.F.R. §1.116 filed on June 22, 2007 has been entered.
2. The indicated allowability of claims 1-3, 15-23, 35, and 36 is withdrawn in view of the newly discovered reference(s) to Hayakawa et al. (USPN 6,858,898 B1) and Segawa (USPN 6,492,778 B1). Rejections based on the newly cited reference(s) follow.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1, 2, 15, and 17 are rejected under 35 U.S.C. 102(e) as being anticipated by Hayakawa et al. (USPN 6,858,898 B1).
5. In reference to claim 1, Hayakawa et al. (USPN 6,858,898 B1, hereinafter referred to as the "Hayakawa" reference) discloses a structure which meets the claim. Figures 1(A)-1(E), 2(A)-2(D), 12(A), and 12(B) of Hayakawa disclose an active matrix

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organic electro luminescence display panel device. There is a substrate (100) with at least one low refractive thin film (101a) formed directly on it. The examiner would like to note that the use of the word "on" by itself does not necessarily mean direct contact between two objects or layers in the semiconductor art. The word "on" by itself could mean that there may possibly be one or several layers between the two objects or layers to which the word "on" is referring. The applicant appears to interpret the word "on" in the same manner. An organic electro luminescence diode (3302, 3304, 3305) is formed on the low refractive thin film (101a) to selectively emit light. A switching device (3202) is formed on the low refractive thin film (101a) for selectively driving the organic electroluminescence diode. A capacitor (54, 12, 55) is formed on the low refractive thin film (15) in order to sustain light emission of the organic electro luminescence diode.

6. With regard to claim 2, the refractive rate of the low refractive thin film (101a) is 1.5 (column 10, lines 37-43).

7. In reference to claim 15, Hayakawa (USPN 6,858,898 B1) discloses a method which meets the claim. Figures 1(A)-1(E), 2(A)-2(D), 12(A), and 12(B) of Hayakawa disclose an active matrix organic electro luminescence display panel device. There is a substrate (100) with at least one low refractive thin film (101a) formed directly on it. The examiner would like to note that the use of the word "on" by itself does not necessarily mean direct contact between two objects or layers in the semiconductor art. The word "on" by itself could mean that there may possibly be one or several layers between the two objects or layers to which the word "on" is referring. The applicant appears to interpret the word "on" in the same manner. An organic electro luminescence diode

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(3302, 3304, 3305) is formed on the low refractive thin film (101a) to selectively emit light. A switching device (3202) is formed on the low refractive thin film (101a) for selectively driving the organic electroluminescence diode. A capacitor (54, 12, 55) is formed on the low refractive thin film (15) in order to sustain light emission of the organic electro luminescence diode.

8. With regard to claim 17, the refractive rate of the low refractive thin film (101a) is 1.5 (column 10, lines 37-43).

9. Claims 16, 19, and 35 are rejected under 35 U.S.C. 102(e) as being anticipated by Segawa (USPN 6,492,778 B1).

10. In reference to claim 16, Segawa (USPN 6,492,778 B1) discloses a method which meets the claim. Figures 1, 2A, and 2B of Segawa disclose an active matrix organic electro luminescence display panel device. There is a substrate (10) with at least one low refractive thin film (15 - either SiO₂ or SiN, column 1, lines 64-67 and column 2, lines 18-21) formed on it. The examiner would like to note that the use of the word "on" by itself does not necessarily mean direct contact between two objects or layers in the semiconductor art. The word "on" by itself could mean that there may possibly be one or several layers between the two objects or layers to which the word "on" is referring. The applicant appears to interpret the word "on" in the same manner. An organic electro luminescence diode (61, 62, 63) is formed on the low refractive thin film (15) to selectively emit light. A switching device (41, 12, 43, 14) is formed on the low refractive thin film (15). A capacitor (54, 12, 55) is formed on the low refractive thin film (15) in order to sustain light emission of the organic electro luminescence diode.

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11. In reference to claim 19, a first electrode (61) of transparent conductive material is formed on the low refractive thin film (15) connected with the switching device. An organic light emission layer (62) of organic luminous material is formed on the first electrode (61). A second electrode (63) of metal material is formed to cover the organic light emission layer (62), the switching device, and the capacitor (column 2, lines 33-39).

12. With regard to claim 35, Segawa discloses that the refractive rate of the low refractive thin film is 1.46 (column 3, lines 11-15).

Allowable Subject Matter

13. Claims 4-14, 24-28, 30, 32-34 are allowed.

14. Claims 3, 18, 20-23 and 36 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

15. The following is a statement of reasons for the indication of allowable subject matter: the examiner is unaware of any prior art which suggests or renders obvious an active matrix organic electro luminescence display panel device with the explicit layer structure with regard to the low refractive thin film directly on a substrate, the buffer layer and capacitor electrode as described the applicant.

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Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kevin Quinto whose telephone number is (571) 272-1920. The examiner can normally be reached on M-F 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sue Purvis can be reached on (571) 272-1236. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

KVQ


SUE A. PURVIS
SUPERVISORY PATENT EXAMINER